



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/740,035	12/18/2003	Simon Wilson	884A.0031.U1(US)	2504
29683	7590	02/14/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			DAVIS, ROBERT B	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/740,035

Applicant(s)

WILSON ET AL.

Examiner

Robert B. Davis

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 29-40 and 43-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15, 16, 19-21, 24-28, 41 and 42 is/are rejected.
- 7) ☒ Claim(s) 17, 18, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/23/5, 4/2/4.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-14 and 43, drawn to a method of injection molding with a label, classified in class 263, subclass 259.
  - II. Claims 15-28 and 41-42, drawn to an apparatus for molding with a label, classified in class 425, subclass 110.
  - III. Claims 29-40, drawn to a molded article with a label, classified in class 428, subclass 139.
  - IV. Claims 44-50, drawn a label, classified in class 428, subclass 156.
  - V. Claims 51-52, drawn to a method for making a label, classified in class 264, subclass 138.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group V, claims 51-52 and Group IV, claims 44-50 is related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the label as claimed could be made by shaping the substrate layer by casting then joining a fabric to the substrate by lamination.
3. Inventions Group III, claims 29-40 and Group IV, claims 44-50 is related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the

Art Unit: 1722

subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claim 38 provides evidence that a label with a substrate and fabric layer is not needed to make the molded article. The subcombination has separate utility such as use as a label joined by adhesive on a non-molded substrate.

4. Inventions Group I, claims 1-14 and 43 and Group III, claims 29-40 is related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed could be made by forming slits in the molded article by cutting, then joining the label to the slits by adhesion.

5. Inventions Group II, claims 15-28 and 41-42 and Group III, claims 29-40 are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed could be made by an apparatus that forms slits in a molded article and then joins a label to the article.

Art Unit: 1722

6. Inventions Group I, claims 1-14 and 43 are drawn to a process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case the apparatus as claimed could be used to mold a preform other than a label such as a protective plate or other reinforcement.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and since the fields of search are not co-extensive, restriction for examination purposes as indicated is proper.

8. During a telephone conversation between Examiner William Watkins and Mr. Harry Smith on 9 March 2005 a provisional election was made with traverse to prosecute the invention of Group II, claims 15-28 and 41-42. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-14, 29-40, 43-52 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### **Drawings**

10. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 232, 710, 720 and 730. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

11. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "222" has been used to designate both the locating portion and the mold cavity cut-outs. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

Art Unit: 1722

notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### **Specification**

12. The disclosure is objected to because of the following informalities:

Line 1 of page 12, location core 230 should be location core 730.

Line 8 of page 12, location core 230 should be location core 730.

Line 22 of page 12, cavity 220 should be cavity 720.

Appropriate correction is required.

### **Claim Interpretation**

13. The phrase "mold cavity" is being interpreted as mold element 220 and not the traditional absence of structure defining the molding surface. It is suggested that the phrase "mold cavity" be amended to include "forming member" or "member", to illustrate that the phrase describes a piece of the mold.

### ***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1722

15. Claims 15, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Waldenrath et al (5,236,657: figures 1-5).

Waldenrath et al teach a molding apparatus comprising: a multi-portion body comprised of opposite mold halves (1, 3) defining a mold void (cavity 5) and a mold gate (8) for injecting material into the void; and a plurality of clamping members (hold-down devices 7) extending into the mold to clamp a sheet (6) against the mold half (1). In regards to claim 25, the projection is shown as a step around the perimeter of the mold. The language regarding a label is merely intended use. Waldenrath et al teach the clamping of a sheet and the mold is clearly capable of clamping a sheet having characteristics of a label.

16. Claims 15 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hara et al (5,618,567: figures 1-5 and column 6, lines 29-56).

Hara et al teach a molding apparatus comprising: a multi-portion body comprised of opposing mold halves (1, 2) defining a cavity illustrated by shaped article (7) in figure 2(d) and a mold gate (10a) for introducing material; and a plurality of clamping members (5) that protrude into the mold cavity to clamp a woven sheet (6) against the mold half (1). In figure 3(c), the mold has protrusions (5d) and projections (5c) that clamp the sheet therebetween.

17. Claims 15, 16 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakagawa (5,575,056: figures 1-6).

Nakagawa teaches a molding apparatus comprising: a multi-portion body comprised of opposed molding members (1 and 2), mold cavity forming member (3) and



Art Unit: 1722

a core (4) arranged for relative movement, the core has projections for supporting an insert (5). The mold members define a cavity (7) having a gate (22) for injecting material. The molding members clamp an insert and are capable of clamping a label. The language regarding the label is intended use as the mold is capable of clamping an insert.

18. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Rhodes, Jr. et al (4,806,094: figure 2).

Rhodes, Jr. et al teach a molding apparatus having opposed mold halves (12, 22) defining a mold void (28) and a conduit (26), and a plurality of clamping members (34) for clamping a film (18) within the mold. The mold clamps a film (18) within the mold cavity and is capable of clamping a label.

19. Claims 15 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by van Dongen (EP 343,755 A2: figures 1-2).

Van Dongen teaches a molding apparatus comprising: opposed mold members (1, 2) defining a cavities (3) and passages for plastics material (column 2, lines 23-29), wherein the mold members have opposed ribs (4 and 7) that clamp a foil (11) to form a plurality of hinges (13) in the molded article. The language regarding a label is intended use as the mold clamps a film and the mold is clearly capable of clamping a label.

20. Claims 15 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Simko (3,403,883: figures 1-4).

Simko teaches a molding apparatus comprising: opposed mold members (17, 18) defining a cavity (19) and a conduit (27) for injecting material, and clamping

Art Unit: 1722

members (29) which protrude into the mold cavity to clamp an insert (10). The clamping members are resiliently biased by springs (33). The language regarding a label is intended use as the mold clamps an insert and the mold is clearly capable of clamping a label.

21. Claims 15, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuji et al (4,491,556: figures 8-17).

Fuji et al teach a molding apparatus comprising: opposed molding halves (11, 19) defining a cavity (16) and a plurality of mold gates (21), wherein the mold has a projection (17) to define a continuous gap (i) to prevent plastic from flowing from cavity (16) to cavity (18).

22. Claim 41 is rejected under 35 U.S.C. 102(b) as being anticipated by Hettinga (5,762,852: figures 1-5).

Hettinga teaches a molding apparatus comprising: a multi-portion body comprised of opposed molding members (22 and 24) defining first and second mold cavities (26, 28) and conduits (38 and 40) for injecting material into the cavities (26, 28) respectively; and a projection (30) for clamping a deformable lamina (18) between the molding members so that the lamina extends between the two molding cavities to form a hinge (29) in the molded article. The means for placing a label so that it extends from the first mold void (or cavity) to the second mold void is defined as projection (718) extending from a first mold and an opposed molding surface as illustrated in figure 7. In regards to 112 6<sup>th</sup> paragraph, the means for placing a label has been construed as a

Art Unit: 1722

projection extending from one mold to clamp a label against a second mold such that the projection forms a partition in the mold cavity.

23. Claims 15, 41 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi et al (6,846,169: figures 8-11).

Kobayashi et al teach a molding apparatus comprising: a multi-portion body having a first mold (15), a second mold (14) coming together to define a first mold cavity supplied by a first resin inlet (11) and a second mold cavity supplied by a second resin inlet (12), and a plurality of projections (41, 42) for defining a shut-off volume (figure 9). The projections clamp skin materials (1 and 2) against the surface of the first mold (15).

24. Claims 15 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Oyama (5,406,699: figure 14).

Oyama teaches a molding apparatus comprising: a multi-portion body comprising opposed mold halves (86 and 87) defining a cavity (16) and a conduit (107) for injecting plastic material into the mold cavity (16), the first mold half (86) includes a resiliently biased insert (111) having a continuous projection (115) which clamps a substrate (12) against projections (116) of the second mold half (87).

25. Claims 15 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese reference (5-8251: figures 1 and 2).

The Japanese reference teaches a pair of opposed molds (1 and 2) defining a mold cavity (3) having a resin inlet (7), and a plurality of clamping members (5) having projections for clamping a sheet material (4) within the mold cavity.

***Claim Rejections - 35 USC § 103***

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

28. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne (4,162,138: figures 1-4).

Byrne discloses a mold having opposed mold halves (12 and 16) having clamping projections (14) and opposing projections (24-pins) and a resin inlet, but the reference does not disclose projections (14 and 24) at the corners of a clamped insert (19). It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Byrne by positioning projections at the corner of the inserts and the mold cavity to accurately position the preform within the mold.

***Allowable Subject Matter***

27. Claims 17, 18, 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

28. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record teaches or suggests the apparatus of claim 16, wherein the label location core and the mold core are arranged to co-operate in the first injection configuration and define a shut-off volume into which injected material cannot enter. The closest prior art (Nakagawa) teaches a three part molding apparatus having clamping members as required by claim 16, but fails to disclose or suggest the molds defining a shut-off volume within the mold cavity as required by claim 17.

In regards to claim 22, none of the prior art of record teaches or suggests the apparatus of claim 21, further comprising a bias between the label location core and mold cavity resisting movement of the locating portion through the opening. The closest prior art (Nakagawa) discloses the apparatus of claim 21, but the mold cavity is comprised of slide cores (3) and does not disclose or suggest a bias between the label location core and mold cavity resisting movement of the locating portion through the opening.

***Conclusion***

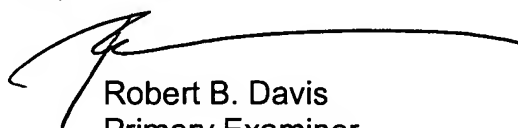
29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the search report have been fully considered and are not deemed as pertinent to patentability.

Art Unit: 1722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert B. Davis  
Primary Examiner  
Art Unit 1722

2/8/06